

**FRANCE TELECOM**

**METHOD OF AUTOMATIC PROCESSING OF A SPEECH SIGNAL**

**ABSTRACT**

This method of automatic processing of a speech signal comprises:

- a step of determination of a sequence ( $H_i^N$ ) of probability models corresponding to a given text (TXT);
- a step of determination of a sequence ( $O_i^T$ ) of acoustic strings corresponding to the diction of the said given text (TXT);
- a step of alignment between the said sequence ( $O_i^T$ ) of acoustic strings and the said sequence ( $H_i^N$ ) of models ( $H_n$ ); and
- a step of determination of a confidence index ( $I_n$ ) of acoustic alignment for each association between a model ( $H_n$ ) and an acoustic segment.

It is characterised in that each step (80) of determination of an alignment confidence index ( $I_n$ ) is carried out at least from a combination of the model probability ( $P_m$ ), *a priori* model probabilities ( $P(\lambda_i)$ ) and the average duration of occupancy of the models ( $\bar{d}(q_i^t)$ ).

Figure 3.